

## 1 Abstract

2 Matching the color axis of the watermark detector to the color direction used by the  
3 watermark embedder: A preferred projection axis is determined for each pixel. The  
4 preferred projection axis for each pixel is determined by examining the color values  
5 of the surrounding pixels in a selected area. Once the preferred projection axis for  
6 each pixel is determined the color values of that pixel are projected onto this axis to  
7 generate a set of values for each pixel. The watermark grid or data signal can then  
8 be detected from these values using known techniques.

9  
10  
11